Serial No.:10/516,859
Art Unit: 2618
Attorney Docket: PU020269

Remarks/Arguments

The Office Action mailed January 26, 2007 has been reviewed and carefully considered.

Claim 7 has been amended. Claims 1-17 are currently pending in this application. No new matter has been added.

Reconsideration of the above-identified application, as herein amended and in view of the following remarks, is respectfully requested.

Claim rejections:

Claims 7-11 currently stand rejected under 35 U.S.C. §101 for being directed to non-statutory subject matter.

The Examiner has objected to the claim 7 recitation of "A computer readable medium *containing* software..." Claim 7 has been amended to clarify the containment of software by the computer readable medium. Specifically, claim 7 now recites "A computer readable medium *having software instructions recorded thereon, wherein the software instructions...*"

The Applicant gratefully acknowledges the Examiner's guidance and suggestions in clarifying the claim 7 preamble. Additionally, in light of the present amendments, the Applicant respectfully requests the Examiner's withdrawal of the §101 rejection of claims 7-11.

Claims 1-2 and 4-6 currently stand rejected under 35 U.S.C. §103(a) in view of United States Patent No. 6,389,548, to Bowles (hereinafter, "Bowles") and United States Patent Application Publication No. 2001/0,033,531, to Ozawa, et al., (hereinafter, "Ozawa"). The Applicant respectfully traverses the Examiner's §103(a) rejection, and requests reconsideration in light of the accompanying comments.

"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art" (MPEP §2143.03, citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). The Applicant respectfully asserts

5

that, taken singly, or in any combination, Bowles and Ozawa fail to teach, suggest, or even remotely render obvious, all of the elements of claims 1-2 and 4-6.

Regarding claim 1 in particular, the Examiner has stated that the combination of Bowles and Ozawa render all of the elements for claim 1 obvious. However, the Applicant respectfully asserts that Bowles and Ozawa, taken singly or in any combination, fail to teach at least the element of "a processor for polling said decoder for a loss of a phase lock in said demodulating of said audio file signal", as recited by claim 1.

In general, the present principles are directed to music signal demodulation, with a processor polling a phase locked loop for a loss of phase lock on an incoming wireless signal. Upon detecting a loss of phase lock the processor restarts the phase locked loop's acquisition process and reinitializes. ("The processor continuously polls the decoder 32 to determine if a phase locked loop in the demodulation of the incoming audio file signal has been lost. If the decoder's phase locked loop has unlocked the processor undertakes a software reset of the decoder and reinitializes a phase locked loop condition in the decoding of the audio file signal received at the antenna 25." Page 4, lines 14-18 of the specification, as filed).

Claim 1 recites a processor element for polling the decoder having phase locked loop. The phase locked loop is used to phase lock an incoming wireless signal so that digital data may be extracted from the analog signal. Loss of a phase lock by the phase locked loop prevents the decoder from properly decoding the digital data. Noisy or intermittent wireless communication signals are common causes of a loss of phase lock. The apparatus recited in claim 1 is advantageously designed to rapidly determine the loss of a phase lock, and to restart the acquisition and locking process.

In contrast, Bowles is directed to correcting phase errors occurring when reading a compact disc. Bowles teaches that "A slicing circuit 31 (slicer) produces a dynamically moving offset. When applied to the HF signal, this offset allows run lengths to be reliably measured as the time between "zero-crossings". The slicing threshold is the sum of two components an average value and a dynamically varying adjustment." (Bowles, col. 7, lines 54-59). "Slicer 37 monitors the phase error detected by the hfSynch's Digital Phase Locked Loop (DPLL). The value HSY_phiErr is the phase error and the signal

6

HSY_pitRise indicates the direction of the HF transition to which it applies, and adjusts the threshold to minimize the difference between consecutive phase errors." (Bowles, col. 8, lines 6-12).

Thus, it can be clearly seen that the slicer of Bowles monitors the phase error, and adjusts the threshold to minimize variances in the phase error. What is clearly absent from Bowles is any mechanism for "polling said decoder for a loss of a phase lock", as recited in claim 1. Furthermore, Bowels makes no accommodation for the reinitialization and restarting of the phase locked loop's demodulating process.

Furthermore, the phase error adjustment monitored by Bowles is completely different than the "loss of phase lock" of claim 1. In particular, Bowles must necessarily have a phase lock in order to have a phase error to monitor. In contrast, the present principles are directed to polling a decoder for a *loss* of phase lock. Detecting the absence of a phase lock completely avoids the measuring of error present in a phase lock, because with a loss of phase lock, there is no phase lock to have any error.

Bowles fails to mention any compensation, action, or other response to a loss of phase lock. The Applicant respectfully asserts that simply adjusting the error in a phase lock is far different than the claim 1 feature of "polling a decoder for loss of a phase lock." Even an artisan highly skilled in the wireless communication arts would not be able to generate the aforementioned element of claim 1 from the teachings of Bowles.

The Applicant further argues that the application of Bowles to the present claims is non-obvious. Bowles deals with the correction of errors due to inaccuracies in the manufacture of compact disks. (See, col. 7, lines 45-52 of Bowles). The phase error correction of Bowles is applied to a signal generated by reading the physical surface of the compact disc. In contrast, the present principles are directed to a phase locked loop in a decoder used for decoding a wireless audio signal. (See, page 4, lines 1-21 of the present specification). Under the present principles, loss of a phase lock at the decoder indicates that the wireless signal has been lost, while under Bowles, variations in the phase error indicate poorly formed CDs. Additionally, restarting of the phase locked loop, according to the present principles, permits the decoder to re-acquire the wireless signal, while the phase error adjustment of Bowles compensates for asymmetries in a physical CD structure.

7

Thus, the present principles address a different problem, using different methodologies, to achieve different end results, than the teachings of Bowles. Therefore, even a highly skilled artisan in wireless data transmissions would not look to the teachings of Bowles to develop the present principles as recited in claim 1.

As Bowles fails to show, teach, or even suggest, at least the claim 1 element of "a processor for polling said decoder for a loss of a phase lock in said demodulating of said audio file signal", Bowles cannot render the element of "a processor for polling said decoder for a loss of a phase lock in said demodulating of said audio file signal" obvious.

Ozawa fails to cure the deficiencies of Bowles in that Ozawa further fails to teach at least the element of "a processor for polling said decoder for a loss of a phase lock in said demodulating of said audio file signal." As stated by the Examiner Ozawa "disclose[s] a CD player plays audio data." (See Office Action dated July 13, 2004). Nowhere does Ozawa teach or suggest any type of decoder polling, or any polling for a loss of phase lock.

Additionally, Ozawa is directed to reading audio data from a CD. The system and method taught by the present principles is directed to the wireless transmission of audio data, with the phase locked loop working to maintain a phase lock on the incoming wireless signal. The field of endeavor to which the present principles are directed is so different from that of Ozawa, that even artisans highly skilled in the wireless communications field would not look to Ozawa to shed light on the problems addressed by the present principles.

Thus, when taken singly, or in any combination, Bowles and Ozawa fail to teach, suggest, or render obvious in anyway, at least the claim 1 element of "a processor for polling said decoder for a loss of a phase lock in said demodulating of said audio file signal." Additionally, both Bowles and Ozawa are directed to fields so different from that of the present principles that skilled artisans would not find it obvious to apply the teachings of the cited references to claim 1. The Applicant, therefore, respectfully requests the withdrawal of the Examiner's §103(a) rejection of claim 1.

8

Claims 7-17 currently stand rejected under 35 U.S.C. §103(a) in view of United States Patent No. 6,466,832, to Zuqert, et al., (hereinafter, "Zuqert") and Bowles. The applicant respectfully traverses the Examiner's rejection, and respectfully requests reconsideration of the rejection.

The Examiner recognizes that "Zuqert, et al. fail to specifically disclose polling said demodulating for a loss in a phase lock in said demodulating; resetting and initializing said demodulating in reply to said loss in said phase lock," (See Office Action dated July 13, 2007, page 6, first paragraph).

As discussed extensively above, Bowles is directed to maintaining a constant phase error, with no thought or insight disclosed regarding polling for phase lock loss, or for resetting and reinitializing the demodulating when the phase lock is lost. Therefore, when taken singly, or in any combination, Zuqert and Bowles fail to teach, suggest, or render obvious, at least the claim 7 elements of "polling said demodulating for a loss in a phase lock in said demodulating" and "resetting and reinitializing said demodulating in reply to said loss in said phase lock" for at least the same reasons as discussed above for claim 1.

Similarly, Zuqert and Bowles, when taken singly, or in any combination, fail to teach, suggest, or render obvious, at least the claim 12 elements of "polling said demodulating for a loss in a phase lock in said demodulating", as discussed with respect to claims 7 and 12. Therefore, claim 12 is patentably novel and non-obvious over Zuqert and Bowles, singly or in any combination, for at least the same reasons as claims 1 and 7.

The Applicant, therefore, respectfully request the withdrawal of the Examiner's §103(a) rejection of independent claims 7 and 12.

Claims 2-6 depend from independent claim 1, claims 8-11 depend from independent claim 7, and claims 13-17 depend from independent claim 12. Accordingly, claims 2-6, 8-11 and 13-17 have all the features and limitations as the independent claims from which they depend. The Applicant respectfully asserts that, due to their dependencies, claims 2-6, 8-11 and 13-17 are patentably distinct and non-obvious over the cited art for at least the same

9

Serial No.:10/516,859
Art Unit: 2618
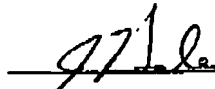Attorney Docket: PU020269

RECEIVED
CENTRAL FAX CENTER

reasons as claims 1, 7 and 12, respectively. Therefore, the Applicant respectfully requests the Examiner's withdrawal of the §103(a) rejection of claims 2-6, 8-11, and 13-17.

AUG 2 3 2007

In view of the foregoing, the Applicant respectfully requests that the rejections of the claims set forth in the Office Action of July 13, 2007 be withdrawn, that pending claims 1-17 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to the Applicant's representatives Deposit Account No. 07-0832.

Thomson Licensing Inc.

Jeffrey Hale, Esq.

Attorney for Applicants

Thomson Licensing Inc.
2 Independence Way
Suite 200
P.O. Box 5312
Princeton, NJ 08543-5312

10